# WILSONWERKS ARCHIVES

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# HOW TO GET THE MOST OUT OF THIS CAMERA

The Automatic 101 is one of the world's easiest-to-use cameras, once you understand a few simple techniques. However, because this camera is completely unlike anything you've ever seen before, it is very important that you learn these operating steps or you're bound to waste film and money and be disappointed with your picture results.

**With this camera, snap all your outdoor pictures in bright daylight, shoot all indoor pictures with flash.**

When you press the shutter release button, a unique electric eye system instantly measures the brightness of the light reflected from the scene and sets the correct exposure for both daylight and flash pictures.

**Before you load your camera with film,** please be sure to read carefully the first two sections in this booklet: Getting Acquainted, and Operation (the blue edged pages). As you read the text and look at the pictures, go through all the motions of using the camera — without film. Then you'll be completely familiar with it before you make your first picture. And that's as it should be.

Once you get the simple operating routine down pat, load a film pack. We suggest that you start with black-and-white. Please remember that even the finest camera and film need some help from the photographer if they are to produce good pictures. That help can be summed up in one sentence: **Plan and think before you shoot.**

Don't just snap away carelessly. You should be able to get eight satisfying pictures from each pack. But unless you plan each picture and think about what you're going to do you'll waste your film.

As a quick guide to help you get a good picture every time, here are seven helpful hints. They're important.

1. In daylight pictures **always have the light on the subject coming from behind you.** For best color pictures place your subjects in bright sunshine.

2. **Move in close,** to get a big image in the print.

3. **Choose colorful subjects** for your color pictures.

4. **Pick a good background,** particularly with flash.

5. **Pull the tab correctly.**

6. **Time development carefully.**

7. **Keep an eye on the temperature.**

As you go through this booklet you'll find these seven points explained in detail. They can make the difference between getting good pictures and poor ones.
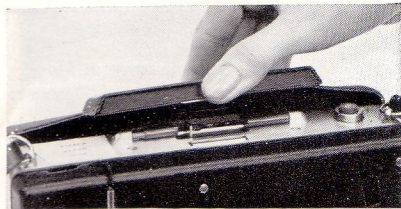
1. Magnet holds cover down. Lift back edge.
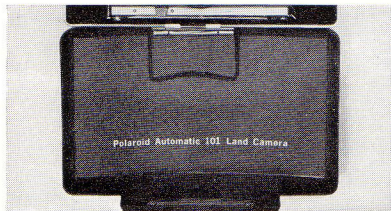


2. You can let cover hang down or . . .



3. . . . to remove it, push spring (arrow) and lift.
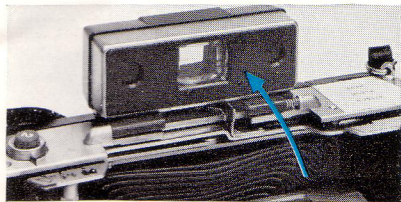


4. Lift finder up and back; magnet will grip it.
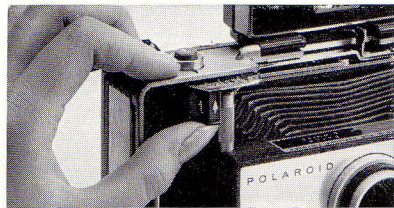


5. Raise button No. 1; this unlocks camera front.
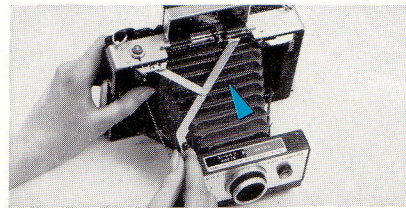


6. Pull camera front out as far as it will go.

**PHOTO 6, IMPORTANT:** Be sure to pull the camera front out until there is a definite click and the locking bar (arrow) snaps into place. If the front isn't fully out and locked, your prints will come out all black, or badly blurred.

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# HOW TO CLOSE AND COVER THE CAMERA
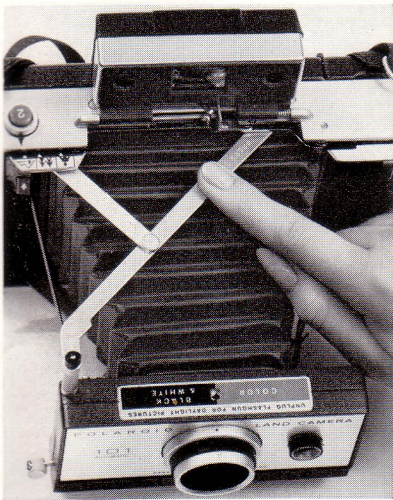


Press down on the locking bar. This releases the front of the camera. Push the front in all the way until it locks.
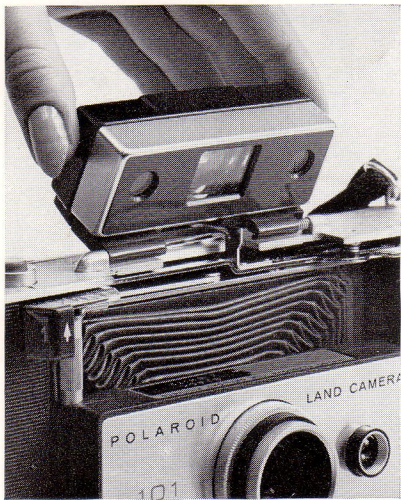


A magnet holds the finder up. Fold the finder down gently. Try not to bang it on the camera.
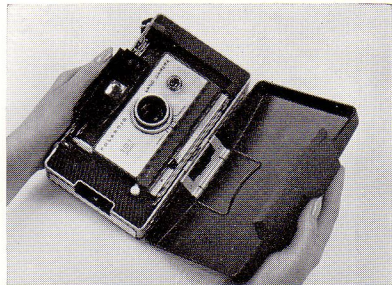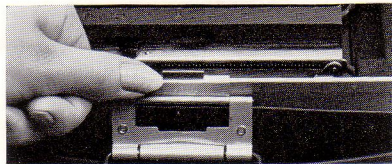




If you have removed the cover: to replace it slide the hinge down over the lock spring until it snaps into place (top). Swing the cover up and over; the magnet on top of the camera will hold it.

**HORIZONTAL:** Grip the two ends. Place your forefingers on the No. 1 buttons; you can easily shift the right forefinger to No. 2 button. To steady the camera, press your elbows into your ribs; rest the camera against your nose.
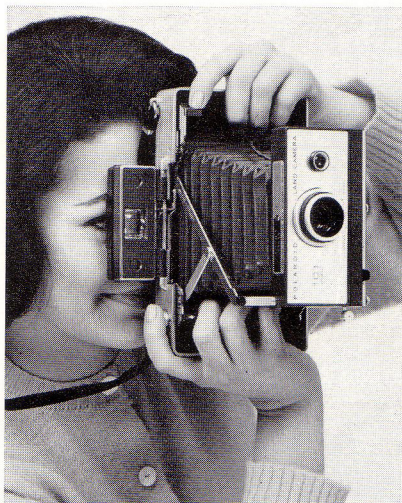
**VERTICAL:** Grip the camera as you would for a horizontal picture, turn it so your right hand is below (center). Or, turn it so your right hand is at the top (right). Either way, brace the camera against your forehead and face.

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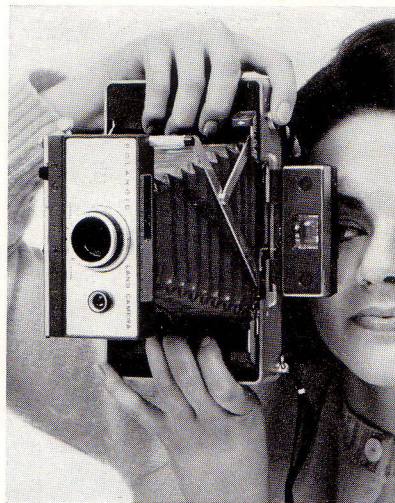
# HOW TO USE THE VIEWFINDER
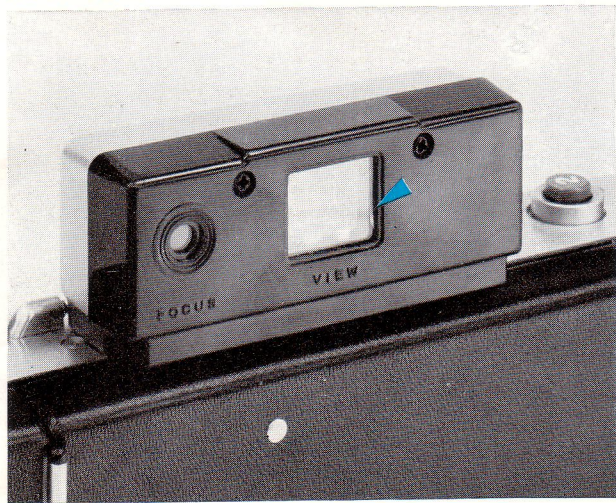




Looking through the viewfinder window (arrow) you'll see a bright, white broken line. Frame the scene with this line. Always try to look through the center of the window and concentrate on your subject, not on the white line. If your subject is very close (3½ ft., for example), allow a little extra space between your subject and the top frame line (above). If not, you may accidentally cut off the top of someone's head in your picture.

## HOW TO FOCUS THE CAMERA
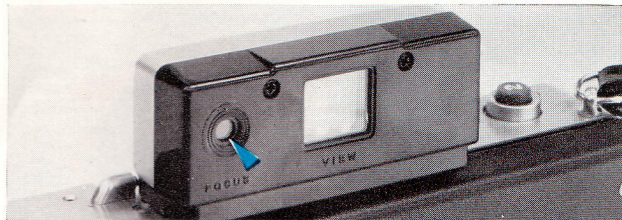
Look through here at the bright spot.▲

▼ Push No. 1 buttons.





OUT OF FOCUS



IN FOCUS
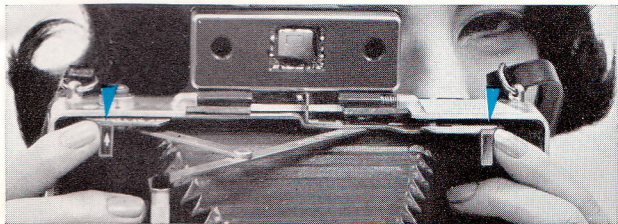
Holding the camera horizontal, place your forefingers on both No. 1 buttons as shown and push them all the way to your left. Look through the Focus window and aim the bright spot in the center at a nearby subject (about 5 ft. away, for example). You should see two images of your target in the bright spot; this means that the camera is not focused for that distance. Push the No. 1 buttons back and forth until the two images become one — sharp and clear. Now the camera is focused. For vertical pictures, focus with the camera horizontal; turn it to aim and shoot.

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# WHAT THE FILM SELECTOR DOES



UNPLUG FLASHGUN FOR DAYLIGHT PICTURES

COLOR ➡ BLACK & WHITE
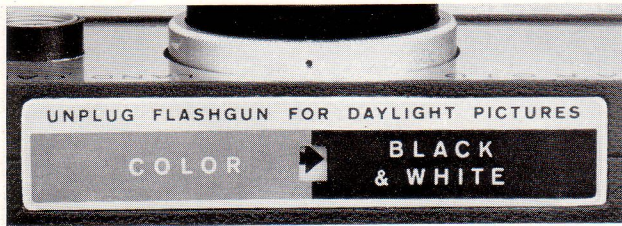
▲ For black-and-white . . .

. . . move the knob this way. ▼





Near and far objects are both in sharp focus.
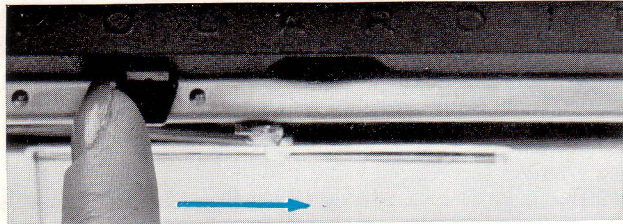
The Film Selector knob sets the camera's electric eye and exposure controls for the kind of film you're using. Because 3000 speed black-and-white film is very "fast" and needs only a brief exposure to light, the Film Selector sets a small lens opening and fast shutter speeds for black-and-white film.

With black-and-white it's easy to focus quickly and sharply. In bright sun you can stop fast action; even with shaded subjects the shutter moves fairly rapidly.

UNPLUG FLASHGUN FOR DAYLIGHT PICTURES
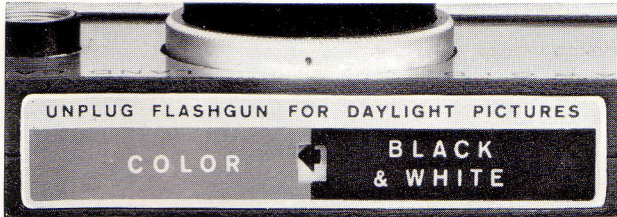
COLOR ◄ BLACK & WHITE

▲ For color . . .

. . . move the knob this way. ▼



Always focus carefully.   Note that the background is blurred.

Color film (75 speed) is much "slower" than black-and-white; more light must reach the film to make a correct exposure, so the Film Selector sets a larger lens opening and slower shutter speeds for color than for black-and-white.

With color film, you must always focus the camera carefully. You can stop moderate action in bright sunlight, but if your subject's in the shade the shutter will move slowly and the picture may be blurred due to movement.

# PRACTICE THE 1, 2, 3 SYSTEM



**ONE** is for focusing. Look through the Focus window and aim the bright spot at various subjects. Push the No. 1 buttons and practice bringing together the two images of your subject in the bright spot to make one clear image. Then shift your eye to the View window and frame your subject in the white line.
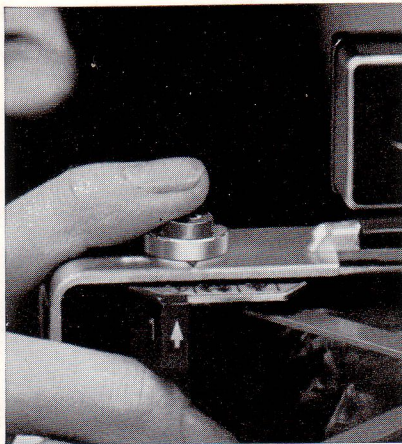
**TWO** is for shooting. Practice pressing the No. 2 button slowly until the shutter clicks. In dim light hold No. 2 down and stay very still until you hear the second click as the shutter closes. Then you can move and let No. 2 up. If nothing happens when you press No. 2, perhaps you forgot to reset No. 3 (right.)
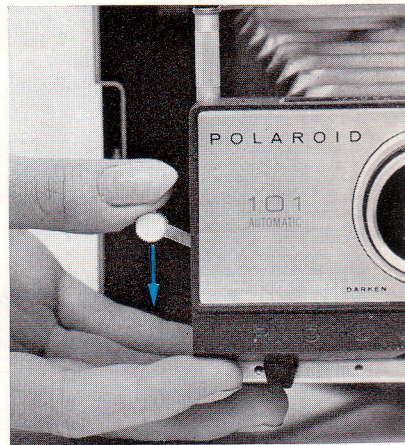
**THREE** is for resetting. Right after snapping a picture, always push down No. 3 button firmly until it locks and stays down. This resets the shutter for the next picture. If you don't reset No. 3 button, you won't be able to shoot your next picture; nothing will happen when you press No. 2 button.

# HOW TO SET THE LIGHTEN/DARKEN (L/D) CONTROL
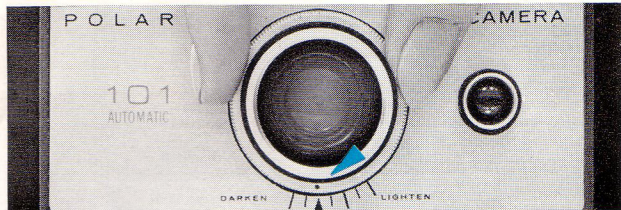
Normal position for most pictures.　▲ Front view.　▼ Top view.



To make prints darker. ▲　　　　　　▼ To make prints lighter.

For all black and white daylight and flash pictures, set the black dots on the L/D control at the Normal position (arrows).

Also set the L/D control to Normal for all color pictures, with this exception.　On the back of some color film packs you may find a printed sticker advising you to set the L/D control one or two dots towards Lighten for all pictures made with that pack.　Please follow those instructions.

For daylight pictures always arrange your subjects so the

light on them comes from behind you, over your shoulder. If the light comes from behind your subject, or if the light on the background is brighter than the light on the subject, the electric eye will be "fooled" and your pictures won't be correctly exposed.　Page 28 explains what to do about this.

To make prints come out lighter or darker than they do at the Normal setting, turn the L/D control towards Lighten or Darken as shown above.　Page 26 shows what this does.

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# HOW TO LOAD A FILM PACK: THE IMPORTANT FIRST STEP
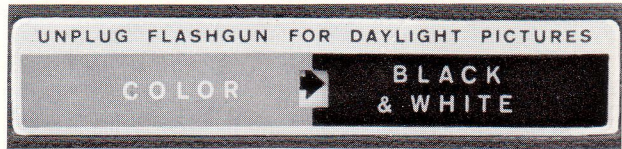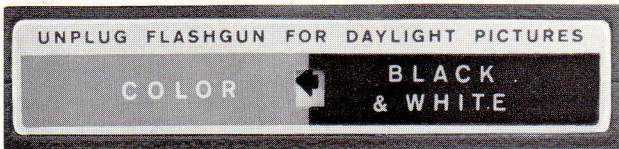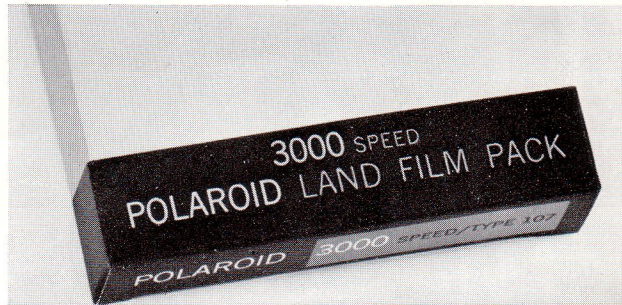




**SET THE FILM SELECTOR:** As soon as you decide whether you're going to load black-and-white or color film, set the Film Selector accordingly. Do this before anything else so you won't forget to do it. If the Film Selector is set wrong, your pictures won't come out right — they will be almost all blank white or black with few details showing.
**Always open the package and load film in the shade, not in direct sunlight, to avoid fogging the film.**
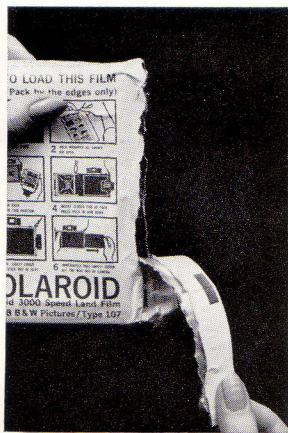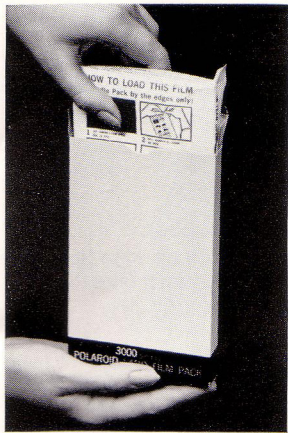
Open the top of the box. With color film there's a set of mounts; with black-and-white film there's a coater. Remove these and the instruction sheet (please read it). Pull out the film package. Handle it gently, carefully. Save the box to carry prints in safely. On the back of the black-and-white box is a device to help you coat prints. You need this.

Hold the package near the edges. **Don't press hard on the middle of the package.** Starting at the corner, tear open the entire side of the package along the dotted line. When the side is open, rip apart the front and back of the package. Lift out the pack. Dispose of the little package of silica gel. Always handle the pack by the edges only. You may encounter some film packages carrying instructions originally intended only for Automatic 100 cameras. Where the instruction is to "Set Film Speed Dial to 75" set the Film Selector to COLOR; where the instruction is to "Set Film Speed Dial to 3000" set the Film Selector to BLACK & WHITE.

# HOW TO LOAD A FILM PACK (cont.)
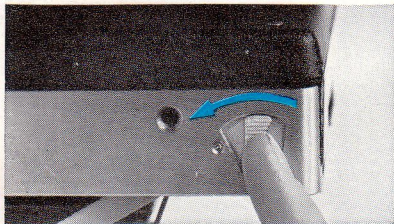


**1.** Push the back door latch; the door will pop up.
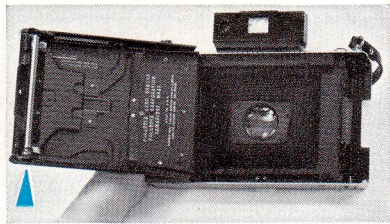


**2.** Open it all the way. Are the rollers (arrow) clean? If not, clean them as shown on page 39.



**3.** Hold the film pack by the edges this way so the printing on the safety cover faces the lens.
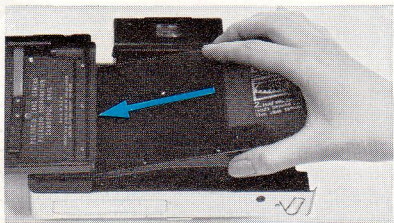


**4.** Push the closed end of the pack under the door hinge, against a light spring tension.
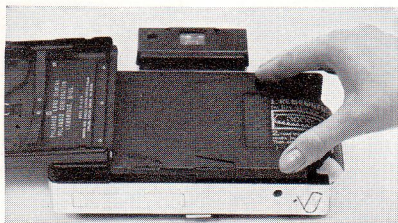


**5.** Push the pack down into the camera. You'll feel it snap into place.
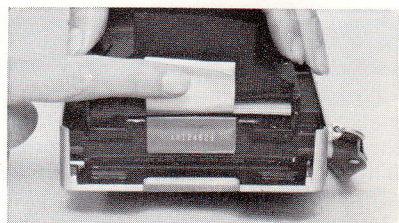


**6.** Be sure the white tabs are free and not folded under. Close the back door. Press both sides firmly to be sure that both sides latch.

# AFTER YOU LOAD BE SURE TO MAKE THESE CHECKS



**1.** The black tab of the safety cover must stick out of the small slot (No. 4). If not, reopen the back, lead the tab out.
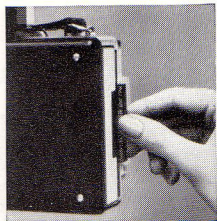


**2. & 3.** Pull the safety cover all the way out of the camera without stopping. Don't rip it!
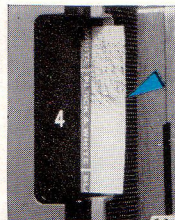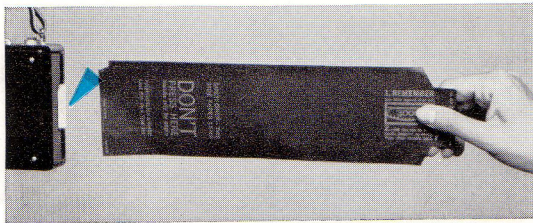


**4.** With the safety cover out, the white tab (arrow) should stick out of the small Slot (No. 4). Don't pull the white tab. You're now ready for the first picture.
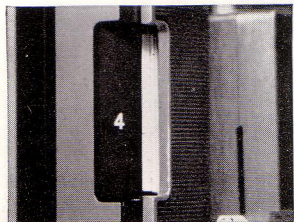


**5.** If there's no white tab to pull, do the following in the shade or indoors, not in the bright sun.
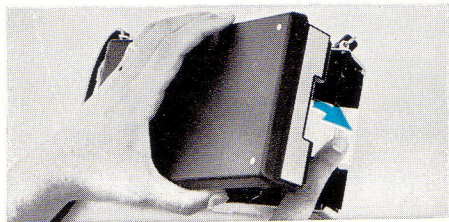


**6.** Open the back of the camera part way and, without disturbing or moving the film pack, push the white tab out into the open.
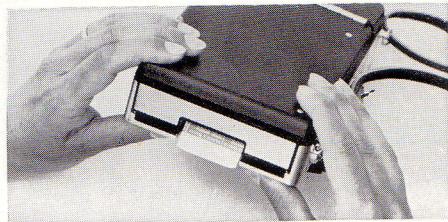


**7.** Close the back of the camera, making sure that both sides are locked securely and the white tab is outside in the No. 4 slot.

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# HOW TO SET THE CAMERA FOR A COLOR PICTURE
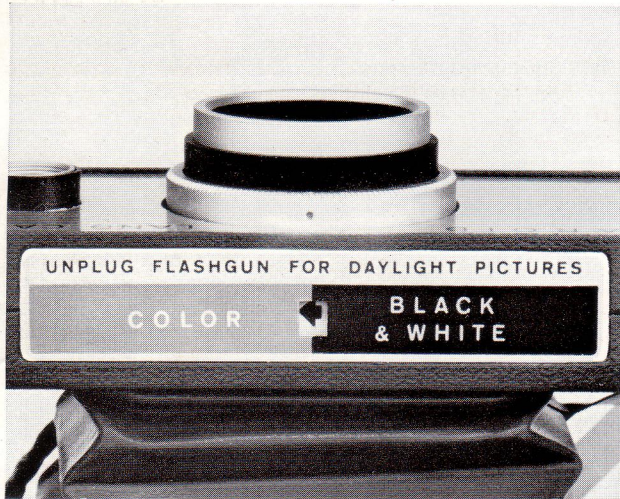




Move the Film Selector knob so the arrow in the Film Selector points to COLOR. Use this setting for all color pictures, in daylight and with flash. Set the L/D control to Normal, with this exception. On the back of some color film packs you may find a printed sticker advising you to set the L/D control one or two dots towards Lighten for all pictures made with that pack. Please follow those instructions.
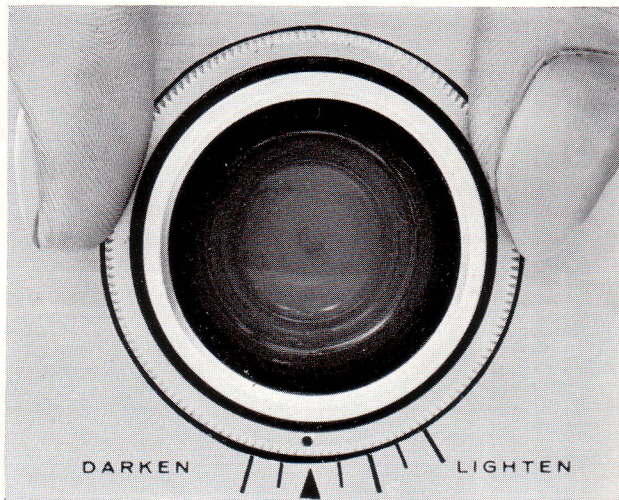
**USE BRIGHT SUN, COMING FROM BEHIND YOU:** Place your subject in bright sun so the light is coming over your shoulder. Don't stand so your subject is between you and the sun; your picture will be too dark.

**AVOID DIM LIGHT:** The shutter moves slowly and your picture may be blurred. But if you must make a picture without flash in dim light, follow the suggestions on page 29.

**WATCH THE BACKGROUND:** The light on the background, behind your subject, should be just about as bright as the light on the subject. Don't photograph someone in the shade if the background is out in the open and brightly lit. The strong light behind the subject will "fool" the electric eye; your picture will be too dark (see page 28).

**MOVE IN CLOSE:** The bigger your subject is in the print, the more color and detail you'll be able to see, and the better the picture will look. For scenic pictures, try to get something big, solid looking, and colorful (if possible) into the foreground to help fill the print.

**HAVE PLENTY OF COLOR:** Look for subjects and backgrounds with strong, bright colors in big, solid chunks. If your subject isn't wearing colorful clothes, add color with a bright shirt, scarf, or jacket. Or, find a colorful background — anything that will fill at least one-third of the picture area with strong, solid color. Don't expect colorful pictures of people in dark clothes or wearing delicate pastel colors or white; plain, drab backgrounds won't add color to your prints.

**TIME DEVELOPMENT CAREFULLY:** Follow the recommendations in the film instruction sheet. These may change from time to time. Use an accurate timepiece. If you have a Polaroid Development Timer, check it occasionally against a watch with a second hand; if it's fast or slow, allow for this when developing your pictures. Prints that are overdeveloped may look too bluish; those that aren't developed long enough will have a pinkish cast and the colors will be weak.

**KEEP AN EYE ON THE TEMPERATURE** Heat and cold have a great effect on the quality of your pictures. Be sure to read carefully page 25, which explains how the temperature affects your pictures and what to do about it.

**IF YOUR PICTURE IS TOO DARK OR TOO LIGHT:** Use the L/D control as shown on page 26 to make the next one of the same subject, in the same location and lighting conditions, come out exactly as you want it to.

**Never try to use flash with daylight color pictures.
It won't work and your pictures will be too dark.**

# HOW TO SET THE CAMERA FOR A BLACK-AND-WHITE PICTURE
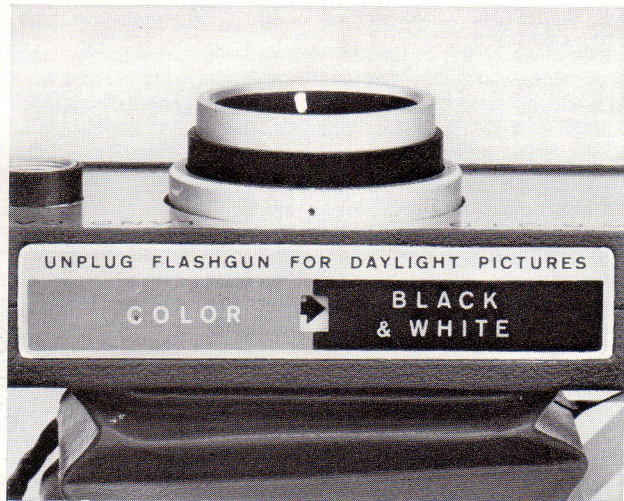




Move the Film Selector knob so the arrow in the Film Selector points to BLACK & WHITE. Use this setting for all black-and-white pictures, in daylight and with flash. Set the L/D control to Normal.

**USE BRIGHT, EVEN LIGHT, COMING FROM BEHIND YOU:** Place yourself so the light on the subject is coming over your shoulder. Don't have the subject between you and the sun. For portraits you'll get best results when a cloud blocks the direct sun, or on an overcast but bright day, or in open shade.

For scenic pictures, avoid high overhead sun, shoot with the light coming from behind you and from the side.

**AVOID DIM LIGHT:** The shutter moves slowly and your picture may be blurred. But if you must make a picture without flash in dim light, follow the suggestions on page 29.

**WATCH THE BACKGROUND:** The light on the background, behind your subject, should be just about as bright as the light on the subject. Don't photograph someone in the shade if the background is out in the open and brightly lit. Strong light behind the subject will "fool" the electric eye (page 28).

**MOVE IN CLOSE:** The bigger your subject is in the print, the more details you'll be able to see. For scenic pictures, try to get something big and solid looking into the foreground to help fill the print and add a feeling of distance.

**TIME DEVELOPMENT CAREFULLY:** Follow the recommendations in the film instruction sheet. These may change from time to time. With black-and-white film no harm is done if you overdevelop for a few extra seconds; in fact, it may improve some pictures. However, if you develop for less than the recommended time, your pictures will be of poor quality, with a gray, washed-out look.

**KEEP AN EYE ON THE TEMPERATURE:** Cold weather or excessive heat can affect the quality of your pictures. Be sure to read carefully page 25, which explains how the temperature affects your pictures and what to do about it.
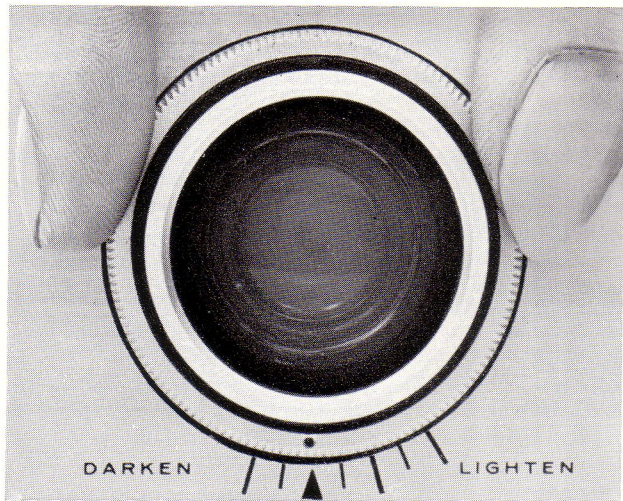
**IF YOUR PICTURE IS TOO DARK OR TOO LIGHT:** Use the L/D control as shown on page 26 to make the next one of the same subject, in the same location and lighting conditions, come out exactly as you want it to.

**Never try to use flash with daylight pictures. It won't work and your pictures will be too dark.**

# HOW TO TAKE A PICTURE!



FRAME
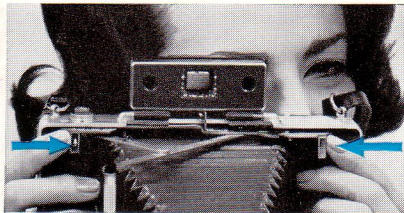


FOCUS



AIM

**1** **FOCUS:** Look at your subject through the View window. Come close enough to fill most of the frame. Shift your eye to the Focus window. Push the No. 1 buttons until the bright spot shows a single clear image of the most important part of your subject. Shift your eye back to the View window, center your subject in the white frame.
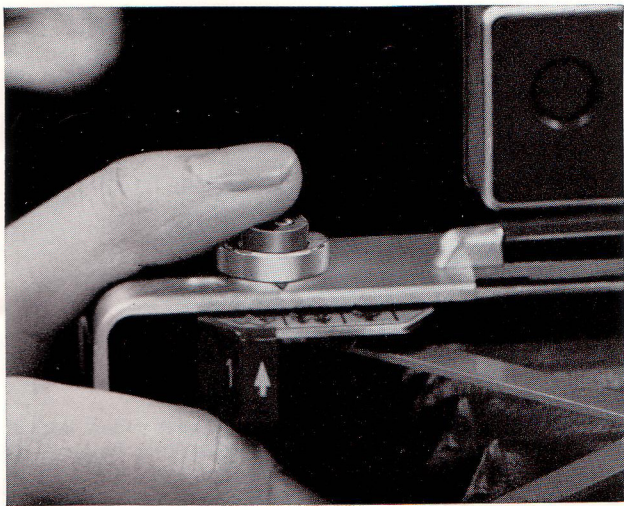
**2** **SHOOT:** Firmly but smoothly press button No. 2, the shutter release, until you hear a loud click. Don't jab at No. 2 — you may shake the camera. When shooting color in the shade or black-and-white in dim light, hold No. 2 down and don't move until you hear a second click as the shutter closes. Then let No. 2 button come up.
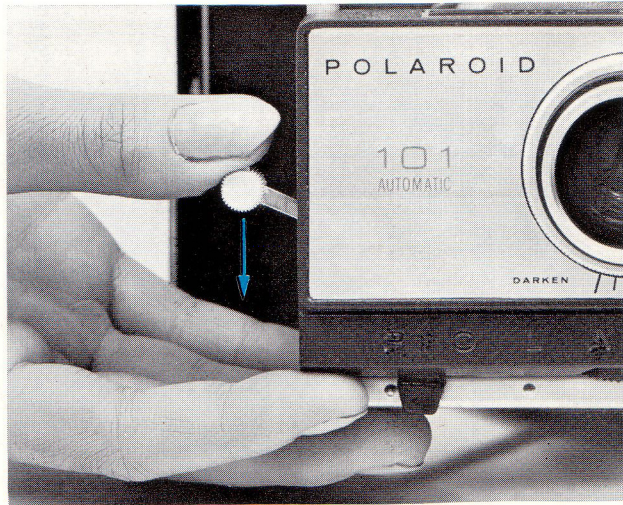
**3** **RESET:** Immediately after snapping a picture, press No. 3 button down firmly until it locks and stays down. This resets the shutter so you'll be ready for the next picture. Always reset No. 3 right away; if you don't, nothing will happen next time you press No. 2 button to shoot.

# HOW TO DEVELOP THE PRINT
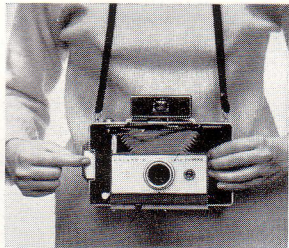


First, the small white tab.
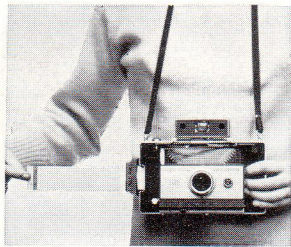


Pull it all the way out of the camera.
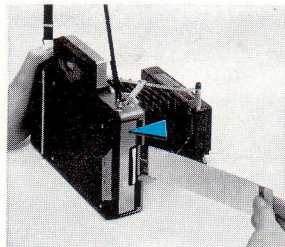


Don't block this door (arrow).
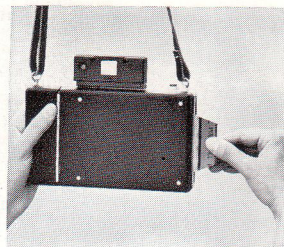


Next, the large yellow tab.

**4** **PULL THE TABS:** Hold the camera in your left hand, as shown. (**Don't hold it any other way!**) Grasp the small white tab between the thumb and forefinger and pull it straight out of the camera, all the way, without stopping. When you pull the white tab out, a concealed door (arrow) opens and a yellow tab pops out. Don't block this door in any way while pulling the tabs.

Pulling the small white tab does not start development. It only prepares the film for the next step, which is pulling the yellow tab. Grip the yellow tab in the center so it will come out straight when you pull it out of the camera. If you pull the yellow tab out at an angle, one edge of your picture may not develop properly (see page 45).

**If no yellow tab pops out** when you pull the white tab, stop. Don't pull another white tab. Page 24 shows you what to do in this situation.

**Never pull a white tab when you can see a yellow tab.** If you do so accidentally, don't pull the yellow tabs that appear or you'll spread developer all over the rollers. Instead, as shown on page 24, carefully open the camera back, disengage the tabs from the tab slot and rollers, remove the two picture assemblies, and close the back.

**When you pull the yellow tab,** hold the camera so the lens faces straight ahead of you, not pointing down. This, plus gripping the center of the tab, helps you to pull it out straight.
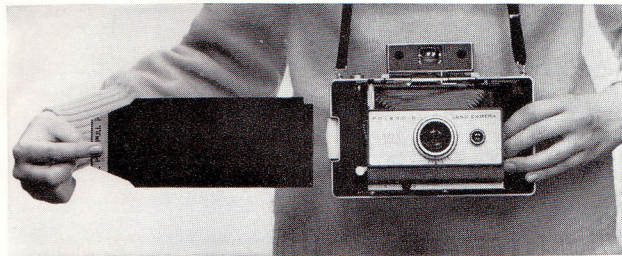
Pull it straight out of the camera, swiftly. Begin timing.



Lift off the white print quickly.



Fold up the negative.

**Pull the yellow tab straight out of the camera** all the way, swiftly, without hesitating. This starts development of your picture, so begin timing as soon as you pull the tab out. How fast is a swift pull? It should take about as long as it takes you to say "PULL IT" briskly, each time you pull the tab. If your picture is full of white specks, pull a bit slower.

The picture develops outside the camera. While it's developing, hold the tab by the yellow tip, or lay the picture assembly down flat. Don't touch or bend the white paper or lift it off. Outdoors, don't let the picture assembly flap in the breeze. Develop the picture for the full time recommended in the film instruction sheet.

After the recommended development time, quickly strip the white print off the brown paper starting from the end nearest to the word PULL. A color print will look nearly dry, but don't touch the face for a few minutes. It will harden to a tough, glossy finish. When it is dry, mount it on a color print mount, which is supplied with the film.

Don't touch the face of black-and-white prints. You must coat them to prevent fading and other damage (see page 27 for how to coat prints).

To avoid contact with chemicals left after the print is removed, fold up the negative with the moist side in. Please put it in a waste basket or film box. Don't be a litterbug!

**Check the temperature! It's important. See page 25.**

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# IF NO YELLOW TAB POPS OUT WHEN YOU PULL THE WHITE TAB, STOP!
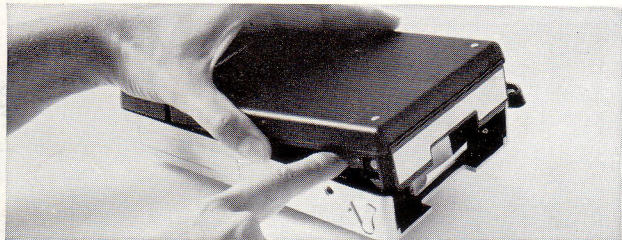


Don't pull another white tab. Instead, gently open the camera back just enough to get one finger under it to hold down the film pack and keep it in place. Do this indoors
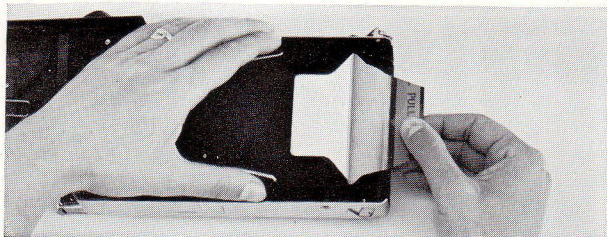


or in the shade. While holding the pack down lightly with a fingertip (picture at left) slowly open the back all the way and take hold of the topmost yellow PULL tab, as shown.
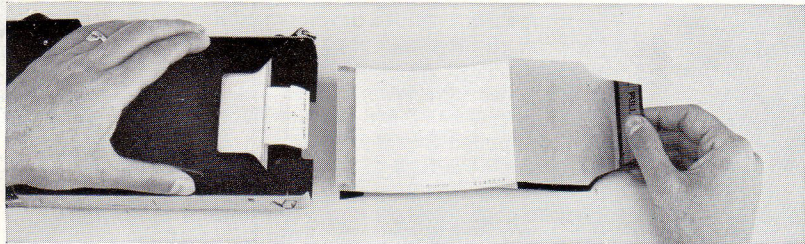


Gently pull the entire picture assembly all the way out of the pack and discard it. Don't try to save it. While the back door is open check that the rollers are clean (p. 39).
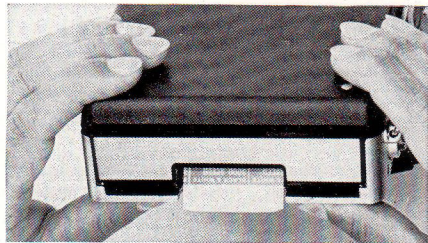


Close the back of the camera, making sure that the next white tab sticks out of the small slot next to No. 4. Check that both sides of the back latch securely.

24

# CHECK THE TEMPERATURE! IT'S IMPORTANT

Cold and heat have a great effect on the way your picture develops and on the print quality. Even moderate cold can ruin your pictures unless you take precautions.

**The important factor is the temperature of the camera and film at the time you're developing the picture.**

A loaded camera carried outdoors in cold weather for half an hour gets thoroughly chilled. If you then enter a warm house and a few minutes later shoot a flash color picture the results are likely to be bad. It takes a long time for a cold camera and film to warm up.

However, if camera and film are indoors and warm, you can step outside to snap the children in the snow, pop back in again in a minute and develop the picture normally.

Excessively hot weather also affects development. However, both color and black-and-white films develop well in a fairly wide range of warm and cool temperatures if development time is adjusted for the temperature.

Be sure to read the details of development time and temperatures in the instruction sheet with each film pack. These recommendations may change from time to time.

## HOW TEMPERATURE AFFECTS COLOR FILM

The normal developing times for color film are set for temperatures between 70°F and 80°F. When it's a bit cooler (60°F–70°F) the action of the developer chemicals slows down and you must develop for a longer time.

When the temperature gets to 60°F and below, the chemical action is so sluggish that the picture won't develop well without help. That help is the Cold-Clip (page 46).

Contrariwise, above 80°F the chemicals get super active and the correct developing time is less than normal. Development at temperatures over 90°F is not recommended; in such heat your prints may have a reddish tint.

**Whenever it's cool enough so that you must wear warm clothes to be comfortable use the Cold-Clip.**

If you're pleasantly cool in shirtsleeves or a thin dress, normal developing times probably will do.

But when you're sweltering and can think only of a cool drink and a swim, it's too hot to develop color film.

What if it's warmer than you think it is? Your pictures will then be a bit overdeveloped and some prints may have a slight bluish tint. But this is preferable to too little development. Underdeveloped prints will have a warm, pinkish cast with weak colors. Prints developed in the cold without the Cold-Clip will be dark, with muddy colors.

## HOW TEMPERATURE AFFECTS BLACK-AND-WHITE FILM

The film's normal range of developing times gives good results in temperatures from 60°F to 100°F.

**When the temperature of film and camera is below 60°F, develop for a longer-than-normal time.** Above 90°F development time may be cut slightly but never to less than 10 seconds. For details see the film instruction sheet.

**Never use the Cold-Clip with black-and-white film.**

# HOW TO MAKE PRINTS LIGHTER OR DARKER
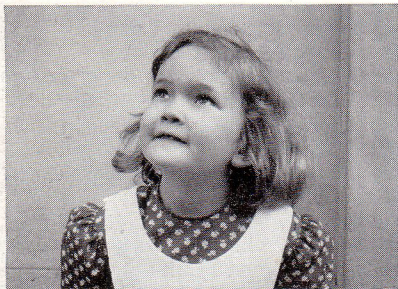


This is well exposed...leave the L/D control here.



If it's too light . . . set the L/D control here.



If it's too dark . . . set the L/D control here.
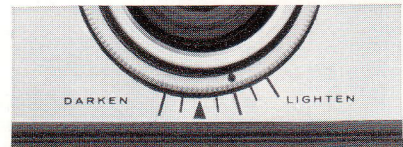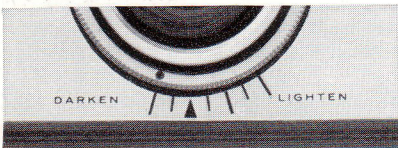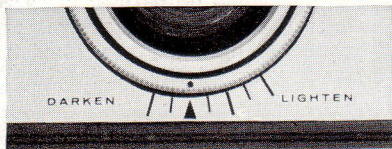
Most pictures made with the light coming from behind you or from the side will be well exposed with the L/D control at Normal position (left, above), but sometimes you may prefer a lighter or darker print. To lighten or darken the next print of the same subject, in the same lighting conditions, adjust the L/D control as shown. To make a small change, turn only to the first small mark. Afterwards, reset to Normal.

On the back of some color film packs you may find a printed sticker advising you to set the L/D control one or two dots towards Lighten or Darken for all pictures made with that film pack. Please follow those suggestions.

On the back of the film box is a device to hold the print while coating; also, instructions for its use. If you don't have a film box, lay the print on a clean, smooth surface, such as a piece of paper on a table, and hold it down by one edge.

There's a coater in each black-and-white film box. Remove it from the plastic tube. Spread the liquid straight away from you over the ENTIRE print, including the borders. Use 6 to 8 straight overlapping strokes and moderate pressure. Don't scratch the print with the edge of the coater. To get more liquid out of a partly used coater, press it down on the near end of the print; then spread the squeezed-out liquid.

The coating dries quickly and forms a tough protective layer over the image. Coat prints as soon as possible. For more details, see the film instruction sheet. Keep freshly coated prints away from each other, or they will stick together.
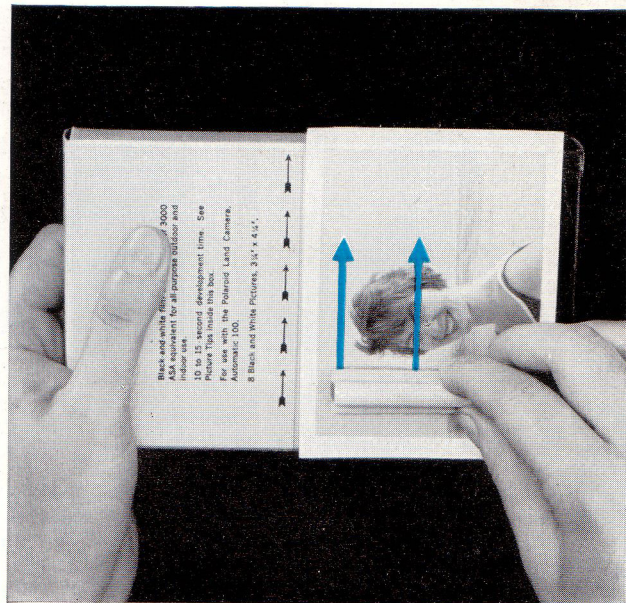


## NEVER TRY TO COAT COLOR PRINTS!

## TROUBLESOME LIGHTING SITUATIONS TO AVOID



Against the sun.
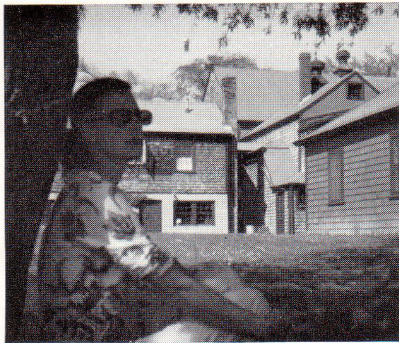


Subject in shade, bright sun behind.



Face turned out of bright sun.

When you aim your camera at a subject, the electric eye measures the brightness of the entire scene and sets the exposure for what it "sees" there. As long as the light on the main subject is just about as bright as the light on the rest of the scene, the picture will be well exposed.

However, if most of the light comes from behind your subject, or if the light on the background is much brighter than the light on the subject, the electric eye will be "fooled" and your picture will come out too dark. That's what happened in the three picture situations shown above. The subject's face is in the shade, but the background is brightly lit. Result: exposure trouble.

Try to avoid these troublesome lighting conditions. If you have to shoot a shaded subject against a bright background or a strong light, turn the L/D control all the way to Lighten.

The best way to beat this problem is to arrange your subjects so the light on them comes from behind you or from the side. Then set the L/D control to Normal position.

## BLACK-AND-WHITE PICTURES IN DIM DAYLIGHT
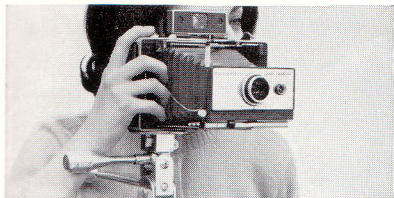
Use a tripod. For verticals, the tripod head must be able to tip sideways.
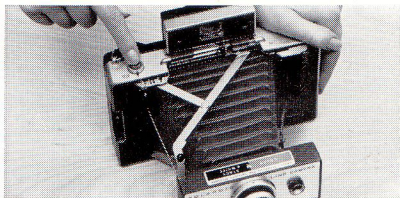


Set the camera on a solid surface, press the back of it down firmly to prevent movement.

**In dim light hold No. 2 button down and stay very still until you hear the second click as the shutter closes. Then you can move and let No. 2 up.**
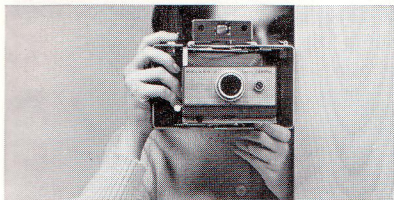


Brace it against a wall or door.
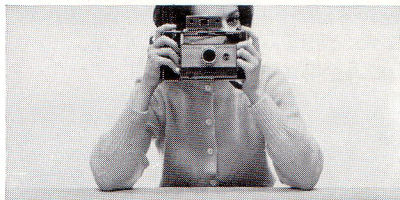


Rest your elbows on something.

With black-and-white film you can shoot pictures without flash in the shade or on a dark, cloudy day. Provided that the light on the subject is even and there are no deep shadows or bright light sources in the scene, the electric eye can make a long but correct exposure — it may be 1/10 sec. or as much as a full second. Whatever it is, the camera must be rock steady or pictures will be blurred. Here are shown some ways of steadying the camera.

For best results with color film you should always have your subjects in bright sunlight.

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# FAST FOCUSING FOR BLACK-AND-WHITE PICTURES



Portraits, up close, 3½ to 5 ft. . . . set the scale here ▼



Groups, other subjects 5 to 10 ft. away . . . use this setting ▼
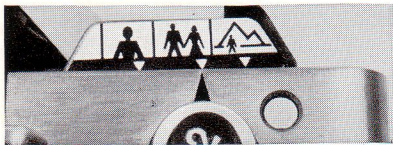


Scenics, everything beyond 10 ft. . . . set the scale like this ▼







If there's black-and-white film in the camera and you're shooting outdoors in daylight or indoors with flash, it's not always necessary to look through the Focus window in order to get sharp pictures. Just push the No. 1 buttons to preset the Fast Focus Scale (as shown) for the kind of subject you are snapping. Then aim through the View window and shoot.

It's handy for pictures of children, pets, etc. in action nearby, or if you want to get both near and distant subjects in focus in the same picture (top, right).

Use the Fast Focus Scale only with black-and-white film outdoors on a bright day or for direct flash indoors. Don't use it with color film at any time; you'll get fuzzy pictures.

**1.** A removable sticker shows where the flashgun goes. Hold the gun as shown and move it toward the camera so the front hook catches the bright trim.
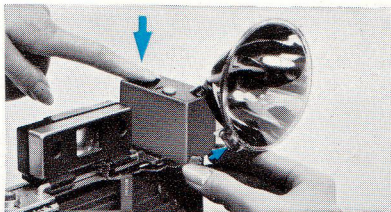
**2.** Press the back of the gun down and move the lever as shown. When the gun is flat, release the lever. A rear hook on the gun will catch.

**3.** Push the plug into the outlet (arrow). **Remove the plug before making any pictures without flash.** If you don't, your pictures will be too dark.
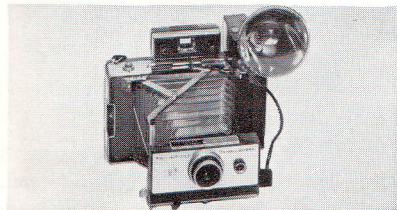
**4.** This is how the gun looks in place. To remove it: pull out the plug, push the locking lever to disconnect the rear hook, lift the gun from the rear.
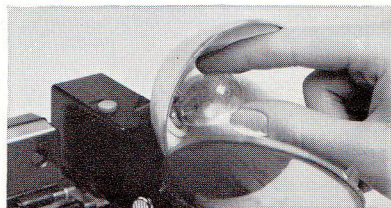
**5.** To put in a flashbulb, open the blue shield, push the bulb into the socket until it catches. Close the blue shield before shooting your picture.
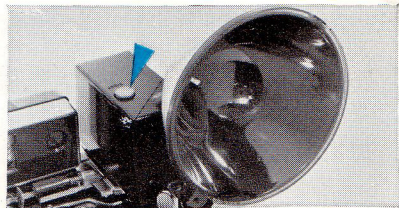
**6.** To remove a used bulb, push the red button. Put used bulbs in a waste basket, away from children, animals, and everybody's feet.

31

## HOW TO SET THE CAMERA FOR A FLASH COLOR PICTURE



UNPLUG FLASHGUN FOR DAYLIGHT PICTURES

COLOR | BLACK & WHITE
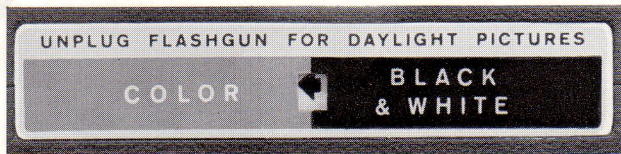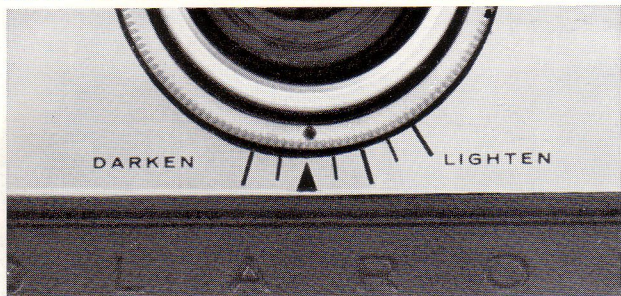


Use only M-3 (clear, not blue) flashbulbs. Set the Film Selector as shown. Set the L/D control as shown, with this exception. On some color film packs you may find a printed sticker advising you to set the L/D control one or two dots towards Lighten for all pictures made with that pack. Please follow those instructions. Aim the flashgun straight ahead. Close the blue shield. Stand 3½ to 10 ft. from your subject. If you're more than 10 ft. away, the picture may be too dark. Don't shoot flash pictures in explosive atmospheres. This camera is not designed for use with electronic flash units.
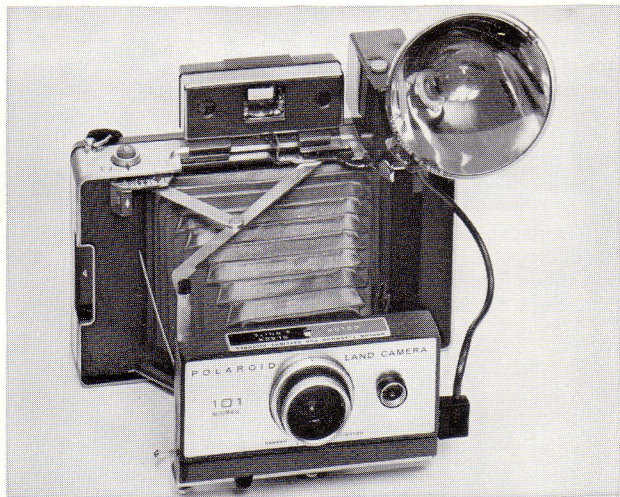
**Never try to use flash in daylight; your pictures will be too dark.**

# TIPS FOR GOOD FLASH COLOR PICTURES

**HAVE PLENTY OF COLOR:** Bright colors in big, solid chunks are important for flash shots. If people are wearing color-less clothes, add color with a bright shirt, sweater, etc. Or brighten the background with cushions or drapes.

**COME CLOSE, BUT SPARE THE EYES:** You'll get best flash results at 4 to 5 ft. Beyond that distance you'll be less able to see details and colors in the print. However, up close the flash may be uncomfortable for people looking right at the camera. Let them look elsewhere. This also reduces "hot spot" reflections from foreheads and noses.

**ALWAYS HAVE A BACKGROUND:** Don't shoot flash pictures where there's no background or it's far away. Example: Someone in the middle of a church or a big office.

**IF THE BACKGROUND HAS BRIGHT, STRONG COLORS:** Orange, light red, deep yellow, medium blue, etc. are the best backgrounds. Place your subject about an arm's length in front of the background, set the L/D control to Normal.

**IF THE BACKGROUND IS PLAIN WHITE:** To get a fairly white wall in the print, place your subject as close to it as possible, turn the L/D control two dots towards Lighten. Or, place your subject about as far from the background as the camera is from the subject, and set the L/D control to Normal. Example: If you're shooting from 4 ft. the white wall ought to be about 4 ft. behind your subject (who should be well exposed, although the wall will be rather dark).

**IF THE BACKGROUND IS DARK WOODWORK OR DRAPES:** Avoid these. If you must use them, place your subject next to the background, set the L/D control to Normal.

**PLACE GROUPS CAREFULLY:** Try to get everyone in a group approximately the same distance from the camera so they will be lighted evenly.

**TIME DEVELOPMENT ACCURATELY:** Follow the recommendations in the film instruction sheet. These may change from time to time. Use an accurate timepiece. If you have a Polaroid Development Timer, check it occasionally against a watch with a second hand; if it's fast or slow allow for this when developing your picture. Prints that aren't developed long enough will have a pinkish cast and weak colors. Over-developed prints may have an over-all bluish tint.

**KEEP AN EYE ON THE TEMPERATURE:** Heat and cold have a great effect on the quality of your pictures. Be sure to read carefully page 25, which explains how the temperature affects your pictures and what to do about it.

**IF YOUR PICTURE IS TOO DARK OR TOO LIGHT:** First check the background (see suggestions above) to determine if it's causing the problem. If not, adjust the L/D control as shown on page 26 to make the next picture of the same subject in the same location come out exactly as you want it to.

# HOW TO SET THE CAMERA FOR A FLASH BLACK-AND-WHITE PICTURE
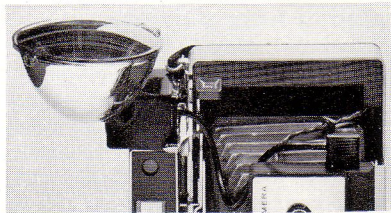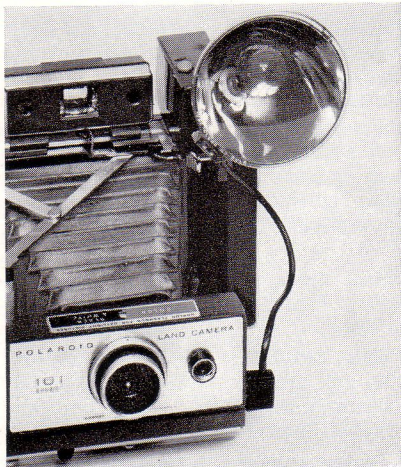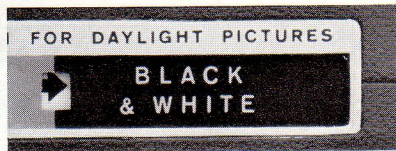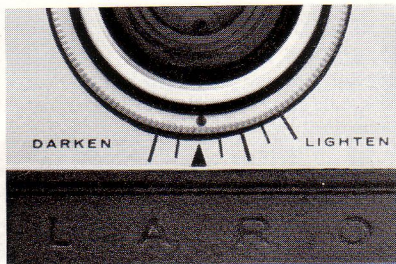


Use only M-3 (clear, not blue) flashbulbs. Set the Film Selector and L/D control as shown. Close the blue shield.

For almost all pictures, aim the flashgun straight ahead (center). Stand 4 to 15 ft. from your subject.

For very close portraits you may want to experiment with bounce flash, which gives a soft light and is easy on the eyes. Swivel the flashgun so it points at the ceiling (above) which must be white and 7 to 9 ft. high. Stand 3½ to 5 ft. from your subject. Don't aim at a strong light (lamp or window) or a brightly lit wall when shooting bounce flash — if you do, the electric eye will be "fooled" and make an accidental time exposure.

Don't shoot flash pictures in explosive atmospheres. Don't try to use electronic flash with this camera.

**Never try to use flash in daylight; your pictures will be too dark.**

## For Direct Flash

**WATCH YOUR DISTANCE:** You'll get best results and good sized details at about 5 ft. Up close, the flash may be uncomfortable for people looking right at the camera. Let them look elsewhere. This also reduces "hot spots" on foreheads and noses. For very close portraits try bounce flash.

**ALWAYS HAVE A BACKGROUND:** Don't shoot flash pictures where there's no background or it's far away. Example: Someone in the middle of a church or a big office.

**FOR MOST MEDIUM TONED OR BRIGHTLY COLORED BACKGROUNDS:** Place your subject about an arm's length in front of the background, set the L/D control to Normal.

**IF THE BACKGROUND IS PLAIN WHITE:** To get a fairly white wall in the print, place your subject as close to it as possible, turn the L/D control one or two dots towards Lighten. Or, place your subject about as far from the background as the camera is from the subject and set the L/D control to Normal. Example: If you're shooting from 5 ft. the white wall ought to be about 5 ft. behind your subject.

**IF THE BACKGROUND IS DARK WOODWORK OR DRAPES:** Avoid these. If you must use them, place your subject next to the background, set the L/D control to Normal.

## For Bounce Flash

**THERE MUST BE A WHITE CEILING:** It should be no more than 9 ft. high and unobstructed by beams, etc.

**ALWAYS HAVE A NEARBY BACKGROUND:** Bounce flash is effective only in medium-sized and small rooms.

**MOVE IN CLOSE:** Come as close as you can focus. Bounce flash is ineffective beyond about 5 ft. Both you and your subject should be standing for best results.

**NO WINDOWS OR LAMPS IN THE SCENE:** The light from a window or lighted lamp will "fool" the electric eye and the camera will make an accidental time exposure.

## For All Pictures

**TIME DEVELOPMENT CAREFULLY:** Follow the recommendations in the film instruction sheet. With black-and-white film no harm is done if you overdevelop for a few extra seconds. However, if you develop for less than the recommended time your prints will have a gray, washed-out look.

**KEEP AN EYE ON THE TEMPERATURE:** Cold weather or excessive heat can affect the quality of your pictures. Be sure to read carefully page 25, which explains how the temperature affects your pictures and what to do about it.

**IF YOUR PICTURE IS TOO DARK OR TOO LIGHT:** First check the background (see suggestions above) to determine if it's causing the problem. If not, adjust the L/D control as shown on page 26 to make the next picture of the same subject in the same location come out exactly as you want it to.

# SOME HELPFUL ACCESSORIES

Cable Release #191, with plastic adapter, fits over No. 2 button. Great for dim light exposures.
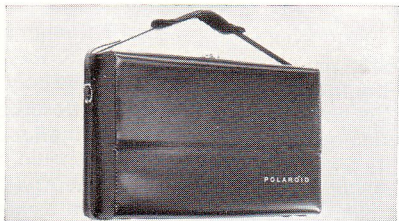
Fitted Case #322 holds camera, three spare film packs, flashgun, bulbs, other accessories.

Development Timer #128 fits on camera strap, times development of your pictures.

Self-timer #192 also fits over No. 2 button, lets you get into your own pictures.
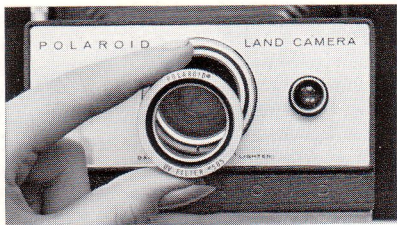
UV Filter #585 reduces excessive blue in shadows in outdoor color pictures.
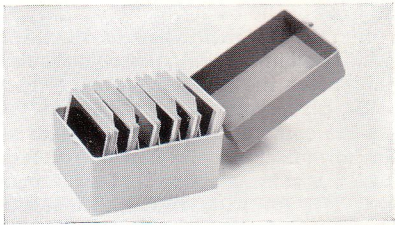
Print File #1501 has five dividers, neatly stores many mounted prints.

These simple accessories can add much to your picture-taking pleasure. On the following pages you'll see other helpful accessories with examples of how they can extend your picture-taking range and give better results.

# A FILTER CAN PEP UP BLACK-AND-WHITE SCENICS
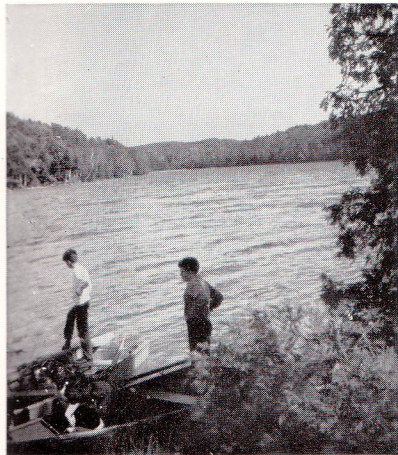
Without the filter, a blank sky.



Press the filter on over the lens mount (collapsing the lens hood) and the electric eye.
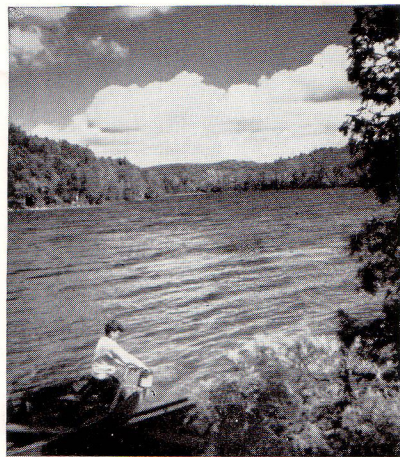




With the filter, dramatic sky effects.

Black-and-white scenic pictures are often disappointing because bright blue skies and fleecy white clouds come out as a dull whitish nothing in the print. The Polaroid Cloud Filter #516 darkens clear blue skies, makes white clouds stand out beautifully. The darkened skies also make fine contrasting backgrounds for light colored subjects on the ground, such as a blonde head, white building, etc. The #516 filter has no effect on gray skies, in the fog or rain, or at night. Don't use it with color film at any time.

With the filter in place, set the L/D control to Normal position. If your print comes out too light or too dark, adjust the L/D control as shown on page 26.

# DEVICES FOR CLOSE-UPS AND PORTRAITS
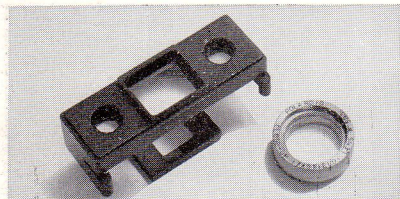


Close-up Lens #583 with its view/focus adapter.
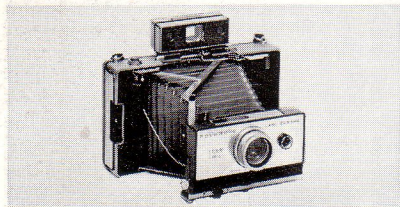


The lens goes over the camera lens; the adapter fits over the viewfinder.



Close-up Lens #583 covers areas from 6″ x 8″ to 8½″ x 11″ for pictures like this.
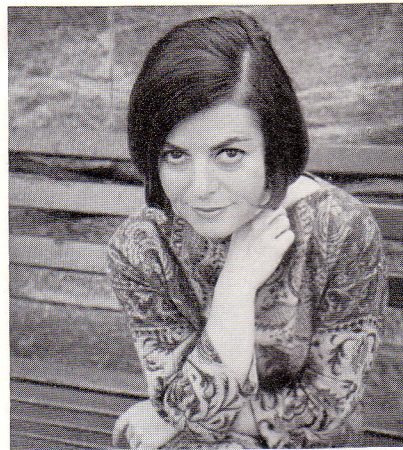


Portrait Lens #581 covers areas from 13½″ x 16½″ to 25″ x 32½″ for pictures like this.

The normal closest picture-taking distance with your camera is about 3 ft. With the Polaroid Portrait Lens #581 you can get within 19 in. for pictures including an area of 13″ x 16½″. It gives excellent results with black-and-white films, but with color you must focus accurately to get sharp pictures. With the Polaroid Close-up Lens #583 you can come within 9 inches to make pictures of flowers, book pages, etc., up to 6″ x 8″ in size. The Close-up Lens #583 is not recommended for use with color films. However, with black-and-white film it produces fine pictures.
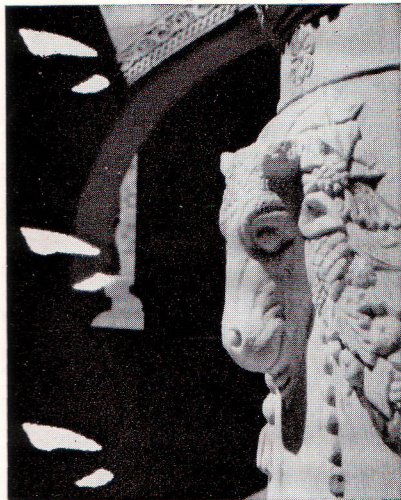
**KEEP THE ROLLERS CLEAN:** Dirt on rollers causes repeated spots on the print. It may also cause poor colors, and even prevent the yellow tab from popping out. Bits of developer can collect on the rollers and in the back of the camera. It's a good idea to inspect the rollers before loading. To do so, lift up the red latch (center, top). Swing out the roller as-sembly. Turn and inspect the rollers. Scrape loose any dried chemicals with a matchstick or thin, stiff cardboard (never anything metallic). Wipe the rollers clean with a damp cloth, dry them. Open the tab slot door; clean out any dirt around the tab slot (arrows, right). Blow out lint or dust in the back of the camera. Push the roller assembly back into place.
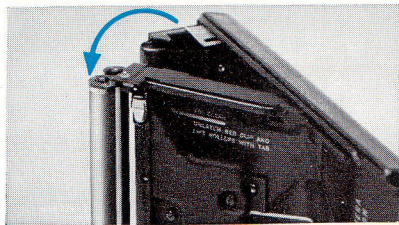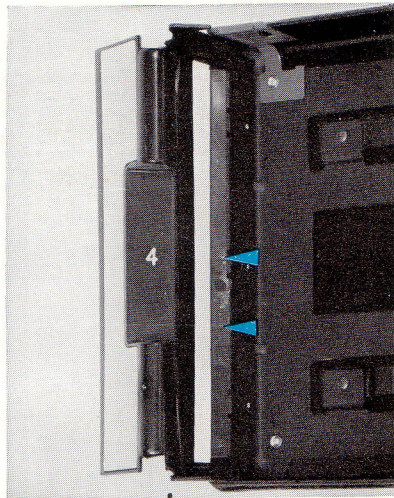
**CLEAN THE LENS GENTLY:** Use clean absorbent cotton. NEVER use silicone coated eyeglass tissues on it. Blow dust off or brush it off lightly. Breathe gently on the lens to moisten it, wipe lightly with clean, dry cotton.

**THERE ARE TWO BATTERIES:** They should be replaced every two years (see your Polaroid Land camera dealer). The battery in the camera back powers the electric eye and shutter controls. If it's weak you'll get all-black prints. To get at it, open the compartment door with a fingernail. The other battery is in the flashgun. To replace it, remove the screws (arrows) and bottom plate. Install new batteries of the same or equivalent type in the same position as the old ones.
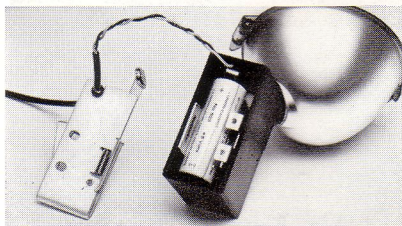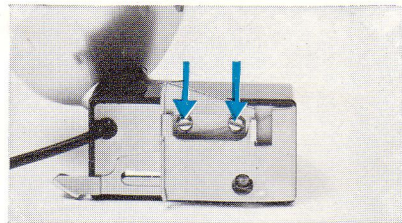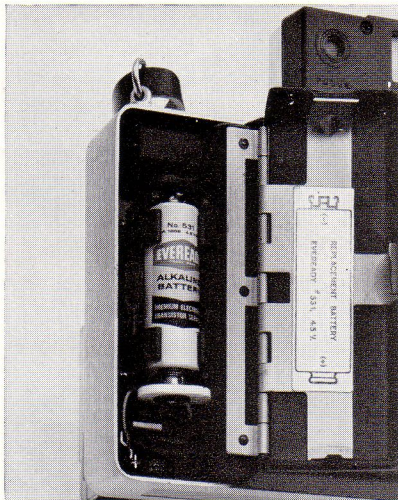
# PICTURE TROUBLES, THEIR CAUSE AND CURE
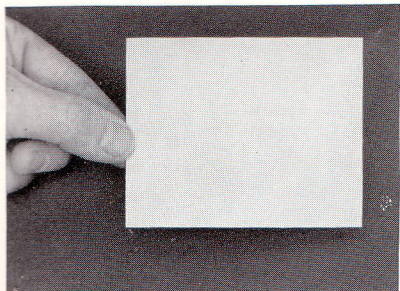
## WHITE, FAINT IMAGE OR NONE

Film was greatly overexposed or light-struck. If it happens with black-and-white, you probably had the Film Selector set to COLOR. Both color and black-and-white films will be light-struck if you pull the safety cover before putting the film pack in the camera, or if you remove a film pack from the camera after pulling the safety cover out of the pack.
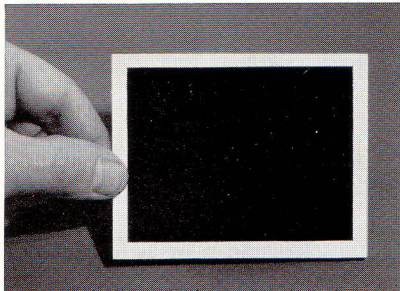
## BLACK, FAINT IMAGE OR NONE

If no details at all are visible, the shutter didn't open. Perhaps you didn't reset No. 3 button (page 21). Or, the front of the camera wasn't pulled out all the way and locked (page 3). Or, the camera battery is dead (page 40). Or, the shutter has been damaged.

If a color print shows a few faint details, the Film Selector probably was set to BLACK & WHITE. If so, reset the Film Selector to COLOR.

## TOO LIGHT: ALL PICTURES

Overexposed, probably because the L/D control was set incorrectly. For most pictures, set it to Normal position (page 11). If that's where it was to begin with, turn it towards Darken (page 26).

41
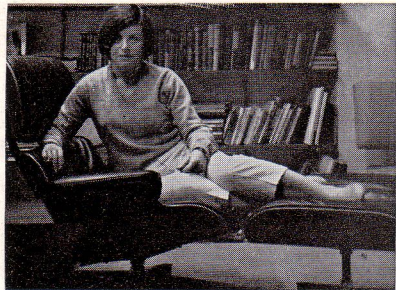
### TOO DARK: ALL PICTURES

Probably the L/D control was set incorrectly. For pictures outdoors or by direct flash, set it to Normal (page 11). If that's where it was to begin with, turn it towards Lighten (page 26). Another possible cause: the flashgun cord was plugged in when you made a non-flash picture.

### ACCIDENTAL TIME EXPOSURE

Happens with flash. If the light is too weak for a correct exposure, the electric eye also makes a time exposure. Picture is usually too light and may be blurred. Causes with bounce flash black-and-white: ceiling too high or too dark; too far away; room too light; strong light source in scene. With direct flash and color, usually caused by being too far from the subject.

If there are lamps in the scene, there may be light streaks in the picture.

### U-SHAPED WHITE AREA

Several possible causes: One or more white tabs were folded under when you loaded the film pack (correct this as shown in photos 6 and 7, page 15; photo 6, page 14). Or, you pulled the yellow tab too slowly (page 23). Or, there may be dirt on the ends of the rollers; keep them clean (page 39). Or, in some way you squeezed the tab slot end of the camera back while pulling the yellow tab (see page 23 for the correct way to hold the camera).

## DOUBLE EXPOSURE

You didn't pull out and develop the first picture before you snapped the second one. Always count 1, 2, 3, 4, and do each of the picture-taking steps as you do so (pages 20–23). Or, you tried a flash picture; the first bulb didn't fire but a second one did. You can get a faint image from the first try.

## REPEATED WHITE SPOTS

Marks like these show that the steel rollers are dirty. Inspect and clean them frequently (page 39).
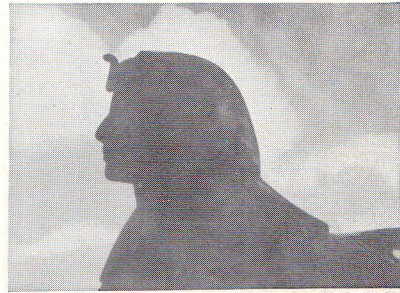
## MUDDY LOOKING PRINT

It wasn't developed long enough. Develop both black-and-white and color prints for the full time recommended in the film instruction sheet. See page 46 for details of how to use the Cold-Clip with color prints. If you develop too long, color prints will be too bluish; it won't harm black-and-whites. If you don't develop long enough, color prints will be brownish pink over-all; black-and-whites will be muddy gray.

# PICTURE TROUBLES (Cont.)
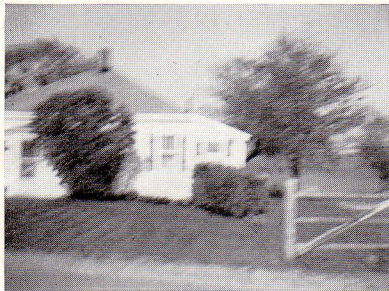






### FUZZY, WITH MOVEMENT

If the entire picture is fuzzy with a pattern of movement, you moved the camera. This is most common with black-and-white pictures in dim light and with color shot in the shade. In dim light brace yourself, press No. 2 button gently, hold it down and don't move until you hear the second click as the shutter closes after the exposure.

### SUBJECT FUZZY, REST SHARP

If the subject didn't move but is unsharp, you didn't focus carefully. Look through the Focus window, aim the bright spot at the most important part of your subject, push the No. 1 buttons until the two images in the bright spot come together (page 7).

If the subject moved, there's not much you can do except ask him or her to hold still or try to press No. 2 when there's no movement.

### OBLONG IN PRINT

The oblong is pink or red in a color picture. You didn't pull the white tab all the way out of the camera. As a result, when you pulled the yellow tab, the white tab was dragged back into the camera and spoiled the picture.

Always pull the white tab right out of the camera (page 22).

**UNDEVELOPED EDGES OR CORNERS**

Picture flaws such as this one are usually caused by pulling the yellow tab out at an angle. In this example the tab was pulled down, instead of straight. When this happens the developer is not spread evenly over the picture and edges and corners may not develop. Pull the yellow tab out straight and swiftly, all the way (pages 22, 23).

# HOW TO USE THE COLD-CLIP WITH COLOR FILM
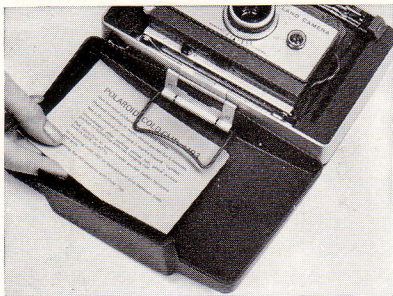






The Cold-Clip, which can be stored in your camera cover when not in use, makes it possible to get good color pictures in low temperatures (60°F. or below). If you are unsure of the temperature, use the Cold-Clip anyway. It may make a noticeable improvement in the color of your pictures and it can do no harm even if the temperature is somewhat above 60°F.

To use it, take it out of the camera cover and put it in a warm inside pocket for five minutes before you start taking pictures so that the Cold-Clip will be warmed by body heat.
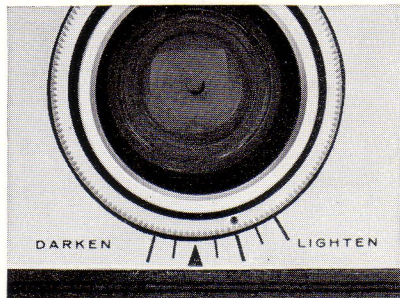
If the temperature of the camera and film is below 60°F. when you develop the picture, using the Cold-Clip, you should expose your color pictures with the L/D control set two marks toward lighten, as shown here.
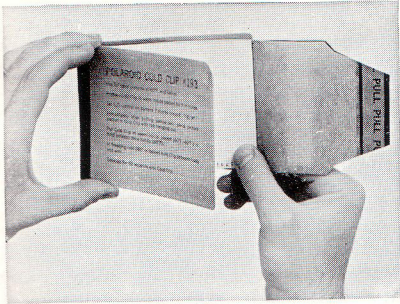
As soon as you have pulled the yellow tab to remove the picture packet from the camera and start development, place the packet inside the Cold-Clip with the tab hanging out. This must be done within 10 seconds.
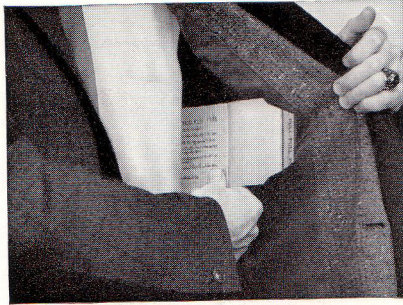
Put the Cold-Clip back in a warm spot: an inside pocket next to body heat when the temperature is 60°F. to 40°F. To get effective warming at near freezing temperatures (40°F. or below) hold the Cold-Clip between body and arm, both to preheat the Clip and to develop the pictures.
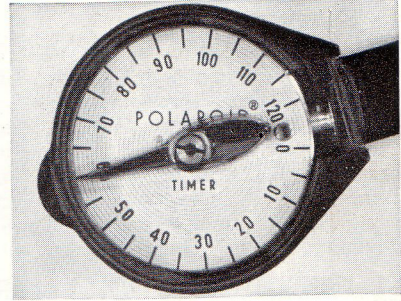
Develop the picture for 60 seconds inside the Cold-Clip, then remove the packet and separate the picture.

**Never use the Cold-Clip for black-and-white pictures. Instead, follow the cold weather directions on the instruction sheet packed with each box of film.**

## PROTECT FILM AND CAMERA FROM HEAT

Extreme heat and high humidity can damage your films, especially after the film pack has been placed in the camera. Don't leave a loaded camera or packages of film lying in direct sun. Remember that the glove compartment or trunk of a car can get as hot as an oven. If you store film or a loaded camera in a closet, keep it near the bottom where the air is cooler. Don't remove a film pack from its sealed foil inner wrapping until you are ready to use it.

## WHERE TO WRITE FOR INFORMATION

Polaroid Corporation maintains a special department to supply information and assistance to Polaroid Land Camera owners. Its name and address is: CUSTOMER SERVICE, POLAROID CORPORATION, CAMBRIDGE, MASS. 02139.

If you have any questions about the operation and performance of the camera, films, and accessories, write to Customer Service. If you have any picture difficulties which are not explained in this booklet, send samples to Customer Service with details about how you made the picture. Please be sure to include a printed or typewritten return address.

## WARRANTY

If, through any human or machine error at time of manufacture, any part or workmanship in this camera proves defective, we will repair it at no charge providing the camera is shipped by prepaid transportation to one of the authorized repair stations listed on the opposite page. This guarantee covers the camera for one year from date of original purchase.

The guarantee does not cover (and charges will be made for) repairs required to correct damage from accident, dropping, mishandling and wear and tear from rough or very heavy use. Only authorized repair stations have the properly-trained staff, and the approved tools, testing equipment and parts to repair these cameras. No reimbursement can be made for repair charges made by non-authorized repair stations. Tampering with the camera, or having it repaired by a non-authorized repair shop, voids the guarantee and charges will be made for any subsequent work that may be required.

No liability is assumed for film or flashbulbs which may be spoiled by a camera failure. Any operating difficulty should be reported at once to prevent needless film waste.

If it becomes necessary to return your camera for repair, your dealer can do so for you, or you may ship it direct to the station located nearest to you. Pack the camera carefully in its original protective box for safe travel, and mail it by prepaid INSURED parcel post. Enclose a note describing the reason for the return and/or pictures illustrating the problem.

# LIST OF REPAIR STATIONS

CALIFORNIA
Polaroid Corp. (West. Div.)
  333 West Mission Drive
  San Gabriel 91776

R. M. Cudabac
  678A Howard Street
  San Francisco 94105

COLORADO
Rocky Mountain Camera Repair
  100 E. 20th Avenue
  Denver 80205

DISTRICT OF COLUMBIA
Strauss Photo-Technical
  Service
  930 F Street, N. W.
  Washington 20004

FLORIDA
Southern Photo-Technical
  Service Inc.
  24 Second Street, S.
  St. Petersburg 33701

GEORGIA
Polaroid Corp. (Southeast Div.)
  1325 Logan Circle, N. W.
  Atlanta 30318

ILLINOIS
Polaroid Corp. (Midwest Div.)
  2041 N. Janice Avenue
  Melrose Park 60160

International Camera Corp.
  844 West Adams Street
  Chicago 60607

KENTUCKY
Camera Service, Inc.
  445 South Fifth Street
  Louisville 40202

LOUISIANA
Murphy's Camera Repair
  2320–22 Tulane Avenue
  New Orleans 70119

MASSACHUSETTS
Polaroid Corporation (Factory)
  640 Memorial Drive
  Cambridge 02139

MINNESOTA
Northwest Camera Repair Co.
  209 Loeb Arcade
  Minneapolis 55400

MISSOURI
Newton J. Draper
  Photographic Equip. Services
  2915 So. Brentwood Blvd.
  St. Louis (Brentwood) 63144

NEW JERSEY
Mack Camera Service
  1025 Commerce Avenue
  Union 07083

NEW YORK
Mack Camera Service of N. Y.
  20 West 31st Street
  New York 10001

OHIO
Polaroid Corp. (No. Central Div.)
  4640 Manufacturing Road
  Cleveland 44135

TEXAS
Polaroid Corp. (Southwest Div.)
  8919 Diplomacy Row
  Dallas 75247

WASHINGTON
Photo-Tronics
  223 Westlake N.
  Seattle 98100

FOREIGN STATIONS

CANADA
Polaroid Corporation
of Canada, Ltd.
  24 Plywood Place
  Toronto 18

ENGLAND
Polaroid (U.K.) Limited
  Queensway House
  Queensway
  Hatfield
  Hertfordshire

GERMANY
Polaroid GMBH
  Holzhausenstrasse 30
  Frankfurt/Main

"Polaroid" and "Polacolor" ®
Printed in U.S.A.
F3328

**2** **SHOOT** Gently press No. 2 button until shutter clicks. In dim light hold No. 2 down, hold steady until second click as shutter closes.

**1** **FOCUS**
Look through Focus window. Aim bright spot at subject. Push No. 1 buttons back and forth until two images in bright spot become one.

**4** **PULL TABS**
Pull small white tab straight out of camera, all the way; large yellow tab will pop out. Pull yellow tab straight out of camera, all the way, moderately fast, smoothly, without hesitation. THIS STARTS DEVELOPMENT. Develop for full time recommended in film instruction sheet. Separate white print from brown paper. Don't touch face of print until thoroughly dry.

POLAROID          LAND CAMERA

101
AUTOMATIC

DARKEN          LIGHTEN

P O L A R O I D

**3** **RESET** Press No. 3 button down until it locks and stays down.